

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

- 1           1. (Currently Amended) A method of managing workflows in a service provider  
2   environment in which a service provider provides data storage resources to a customer,  
3   comprising:  
4           providing the a customer with a list of types of work order requests based on a permission  
5   level defining a level of access to the data storages resources allowed to associated with the  
6   customer, the work order requests comprising requests to manage ~~storage~~ configuration of the  
7   data storage resources provided to the customer;  
8           receiving a selection of a type of work order request from the customer;  
9           enabling the customer to generate a work order request of the selected type in a work order  
10   request submission;  
11           creating a database object based on the work order request; and  
12           storing the database object in a database.

1           2. (Original) The method of claim 1, wherein enabling comprises:  
2           providing to the customer at least one task screen corresponding to the selected type of  
3           work order request and usable by the customer to generate the work order request.

1           3. (Original) The method of claim 1, wherein the work order request comprises values of  
2           parameters specific to the selected type of work order request.

1           4. (Original) The method of claim 1, wherein the database object comprises elements that  
2           include a customer identifier and the selected type of work order request.

1           5. (Original) The method of claim 4, wherein the elements further include a state to  
2           indicate status of the work order request.

1           6. (Previously Presented) The method of claim 5, wherein the state is set to indicate a  
2           new work order request initially and later changed to indicate a closed work order request.

1           7. (Original) The method of claim 5, further comprising:  
2           assigning a work order request identifier to the work order request; and  
3           providing the assigned work order request to the customer.

1           8. (Original) The method of claim 7, wherein the database object is stored in the database  
2 as a table entry, the table entry including fields to store information associated with each of the  
3 elements.

1           9. (Original) The method of claim 8, wherein the elements further comprise the assigned  
2 work order request identifier and the work order request is stored in one of the fields in the table  
3 entry.

1           10. (Original) The method of claim 5, further comprising:  
2 processing the work order request using the table entry, processing comprising attempting  
3 to perform any tasks required to satisfy the work order request; and  
4 updating the state based on the results of the processing.

1           11. (Previously Presented) The method of claim 10, wherein updating comprises:  
2 marking the state to indicate that the work order request is closed if such tasks are  
3 performed successfully; and  
4 marking the state to indicate a failure if such tasks are not performed successfully.

1           12. (Original) The method of claim 10, further comprising:  
2 generating a billable event when the work order request is closed; and  
3 storing the billable event in the database in association with the customer identifier and  
4 account information.

1           13. (Original) The method of claim 1, wherein work order request submission is in the  
2 form of an email.

1           14. (Original) The method of claim 1, wherein work order request submission is in the  
2 form of HTTP.

1           15. (Original) The method of claim 10, wherein processing is managed by a workflow  
2 automation that periodically queries the database to locate any new work order requests based on  
3 the state in the table entry for each work order request.

1           16. (Original) The method of claim 12, wherein the processing, updating, and the  
2 generating and storing of the billable event are handled by the workflow automation.

1           17. (Original) The method of claim 15, wherein the workflow automation invokes other  
2 processes needed to perform the work order request.

1           18. (Original) The method of claim 10, wherein processing is managed manually by an  
2 administrator of the service provider.

1           19. (Original) The method of claim 12, wherein the processing, updating, and the  
2     generating and storing of the billable event are handled manually by the service provider  
3     administrator.

1           20. (Original) The method of claim 12, wherein the processing, updating, and the  
2     generating and storing of billable events are managed manually by the service provider  
3     administrator when the state indicates a failure.

1           21. (Currently Amended) A computer program product residing on a computer-readable  
2     medium for managing workflows in a service provider environment in which a service provider  
3     provides data storage resources to a customer, the computer program product comprising  
4     instructions causing a computer to:

5           provide a the customer with a list of types of work order requests based on a permission  
6     level defining a level of access to the data storages resources allowed to associated with the  
7     customer, the work order requests comprising requests to manage storage configuration of the  
8     data storage resources provided to the customer, wherein the types of work order requests  
9     comprise at least one of requests to:

10           connect the data storage resources to a server;

11           allocate the data storage resources to a customer account;

12           create a mirror;

13           restore remote mirroring; or

14           split a business continuance volume (BCV);

15 receive a selection of a type of work order request from the customer;  
16 enable the customer to generate a work order request of the selected type in a work order  
17 request submission;  
18 create a database object based on the work order request; and  
19 store the database object in a database.

1 22. (Currently Amended) An apparatus for managing workflows in a service provider  
2 environment in which a service provider provides data storage resources to a customer,  
3 comprising:  
4 means for providing a customer with a list of types of work order requests based on a  
5 permission level defining a level of access to the data storages resources allowed to associated  
6 ~~with~~ the customer, the work order requests comprising requests to manage ~~storage~~ configuration  
7 of the data storage resources provided to the customer;  
8 means for receiving a selection of a type of work order request from the customer;  
9 means for enabling the customer to generate a work order request of the selected type in a  
10 work order request submission;  
11 means for creating a database object based on the work order request; and  
12 means for storing the database object in a database.

1 23. (New) The method of claim 1 wherein the types of the work order requests comprise  
2 at least one of requests to:  
3 connect the data storage resources to a server;

- 4 allocate the data storage resources to a customer account;
- 5 create a mirror;
- 6 restore remote mirroring; or
- 7 split a business continuance volume (BCV).